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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

COLILLA, DANIEL JAMES

ART UNIT PAPER NUMBER

2854

DATE MAILED: 09/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/882,154

Applicant(s)

ELLIS ET AL.

Examiner

Dan Colilla

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 26 and 27 is/are allowed.
- 6) ☒ Claim(s) 1-25 and 28-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 April 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 28 and 33-35 rejected under 35 U.S.C. 103(a) as being unpatentable over Hillhouse.

With respect to claim 28, Hillhouse discloses the claimed method for separating a slip sheet from a plate except that he does not mention directing *pulses* of gas. Hillhouse discloses an apparatus for separating slip sheets from printing plates including means for handling plates 44 and 53, means for holding discarded slip sheets 81 and a passage 54 and a conveyor 25 for directing slip sheets to the means for holding. Furthermore, Hillhouse discloses separating the slip sheet 13 from the plate by directing gas at the slip sheet with nozzles 62. While Hillhouse does not mention pulsing the gas, Figures 5E and 5F of Hillhouse show that the blower 62 is not always on. Since the nozzles 62 are turned on and off, it may or may not be considered pulsing. However, it would have been obvious to one of ordinary skill in the art to pulse the nozzle 62 if the first attempt at blowing the slip sheet into the passage 54 was unsuccessful. Additional attempts at removing the slip sheet would result in a pulsing of the nozzles 62.

With respect to claim 33, passage 54 is a chute.

With respect to claim 34, passage 54 is shown in Figure 1 of Hillhouse to comprise a bottom plate, a top plate 34 and two sides (the cut away portions in the Figure).

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With respect to claim 35, the front edge of the top plate 34 is slanted downward.

3. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hillhouse as applied to claims 28 and 33-35 above, and further in view of Ono et al.

Hillhouse discloses the claimed apparatus except for the cart. However, Ono et al. discloses a means for holding 132 discarded slip sheets that is contained in a cart 200. It would have been obvious to combine the teaching of Ono et al. with the apparatus disclosed by Hillhouse for the advantage of easily being able to move the discarded slip sheets wherever necessary when the apparatus needs to be emptied.

4. Claims 1-6, 10-14 and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hillhouse as applied to claims 28 and 33-35 above, and further in view of Angelbeck et al.

With respect to claim 1, Hillhouse discloses the claimed method except for the step of directing gas at a plate and slip sheet interface. Hillhouse discloses a method of separating a slip sheet 13 from a plate including the step of directing gas at the slip sheet with nozzles 62 (Hillhouse, col. 4, lines 5-14). While Hillhouse does not mention pulsing the gas, Figures 5E and 5F of Hillhouse show that the blower 62 is not always on. Since the nozzles 62 are turned on and off, it may or may not be considered pulsing. However, it would have been obvious to one of ordinary skill in the art to pulse the nozzle 62 if the first attempt at blowing the slip sheet into the passage 54 was unsuccessful. Additional attempts at removing the slip sheet would result in a pulsing of the nozzles 62. Angelbeck et al. teaches the step of directing gas at an interface of a plate and slip sheet 19 as shown in Figure 2 of Angelbeck et al. It would have been obvious to

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combine the teaching of Angelbeck et al. with the method disclosed by Hillhouse for the advantage of aiding in the separation of a slip sheet from a plate.

With respect to claim 2, Hillhouse discloses a holding area 81.

With respect to claim 3, Hillhouse discloses nozzles 62 for directing gas.

With respect to claim 4, Hillhouse discloses air (col. 4, line 5) as the gas that is being directed through nozzle 62.

With respect to claim 5, the gas is at a suitable pressure for removing slip sheets and injecting air between slip sheets and plates since this is what the gas is used for.

With respect to claim 6, the optimal pressure at which the gas is used could have readily been determined by one of ordinary skill in the art through routine experimentation and appears to require no unobviousness.

With respect to claim 10, Hillhouse discloses passage 54 which is a chute.

With respect to claim 11, Hillhouse discloses front edge top plate 34 in passage 54 that is angled downward.

With respect to claim 12, Hillhouse discloses the apparatus for carrying out the method as recited in the above prior art rejection of claim 1.

With respect to claim 13, Angelbeck et al. teaches a fan nozzle 4.

With respect to claim 14, the nozzle 62 disclosed by Hillhouse is a jet nozzle.

With respect to claim 29, Hillhouse discloses the claimed apparatus as mentioned above except for the two side panels. Hillhouse discloses a bottom panel for supporting the plates in a handling area, but it is not clear if he discloses two side panels. However, Angelbeck et al.

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teaches an apparatus for removing slip sheets which includes a bottom panel and two side panels for supporting the plates in a handling area as shown in Figure 4 of Angelbeck et al.

With respect to claim 30, Figure 2 of Angelbeck et al. shows that the plates 1 are stored in a cassette 2 which includes a front wall. This wall and the side panels of the cassette 2 would form squared corners.

5. Claims 1 and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hillhouse as applied to claims 28 and 33-35 above, and further in view of Schön et al.

With respect to claims 1 and 8, Hillhouse discloses the claimed method except for the step of directing gas at a plate and slip sheet interface. Hillhouse discloses a method of separating a slip sheet 13 from a plate including the step of directing gas at the slip sheet with nozzles 62 (Hillhouse, col. 4, lines 5-14). Schön et al. teaches the step of directing gas at an interface of a plate 9 and slip sheet 19 as shown in the Figure of Schön et al. It would have been obvious to combine the teaching of Schön et al. with the method disclosed by Hillhouse for the advantage of aiding in the separation of a slip sheet from a plate.

With respect to claim 7, the gas is directed through a nozzle jet 13 (Schön et al., col. 5, lines 8-39). Although it appears that Schön et al. only discloses one air jet 13, the provision of a plurality of the same structure for providing the same function would have been obvious to one of ordinary skill in the art.

6. Claims 1 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hillhouse as applied to claims 28 and 33-35 above, and further in view of Straayer et al.

With respect to claims 1 and 9, Hillhouse discloses the claimed method except for the step of directing gas at a plate and slip sheet interface. Hillhouse discloses a method of separating a slip sheet 13 from a plate including the step of directing gas at the slip sheet with nozzles 62 (Hillhouse, col. 4, lines 5-14). Straayer et al. teaches the step of directing pulsed air at an interface of a plate 26 and slip sheet 75 (Straayer et al., col. 8, lines 62-65). It would have been obvious to combine the teaching of Straayer et al. with the method disclosed by Hillhouse for the advantage of aiding in the separation of a slip sheet from a plate.

7. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hillhouse in view of Angelbeck et al. as applied to claims 29-30 above, and further in view of Walter et al.

Hillhouse discloses the claimed apparatus except for the tapering of the front corners. However, Walter et al. discloses a sheet feeding apparatus with a tapering of guide edges for feeding the side of sheets as shown in Figure 4 of Walter et al. This is well-known sheet feeding structure. It would have been obvious to combine this teaching with the apparatus disclosed by Hillhouse in view of Angelbeck et al. for the advantage for aligning the side edges of a sheet while it is fed forward and preventing jamming from occurring due to a misaligned sheet.

8. Claims 15, 19 and 21-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ono et al. in view of Schön et al.

With respect to claim 15, Ono et al. discloses the claimed apparatus except for the gas nozzle. Ono et al. discloses an apparatus for separating slip sheets from plates including an area 208 for handling plates, and a bin 132 for holding discarded slip sheets. Ono et al. further

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discloses a movable head 109 including a vacuum cup 124 and a cart 200. Schön et al. teaches a gas that is directed through a nozzle jet 13 to create a layer of gas between a slip sheet and a plate (Schön et al., col. 5, lines 8-39). It would have been obvious to combine the teaching of Schön et al. with the apparatus disclosed by Ono et al. for the advantage of aiding in the separation of a slip sheet from a plate. Schön et al. does not mention pulsing the gas, however, it would have been obvious to one of ordinary skill in the art to pulse the nozzle jet 13 if the first attempt at removing the slip sheet was unsuccessful. Additional attempts at removing the slip sheet would result in a pulsing of the jet nozzle 13.

With respect to claim 19, Ono et al. discloses an angled plate below the stack of plates 210 which forms a slanted upper surface of bin 132.

With respect to claim 21, although it is not explicitly recited, some portion of the cart 200 must be removable in order for the bin 132 to be emptied, and there does not appear to be any criticality in the placement of the removable part.

With respect to claims 22-24, although it appears that Schön et al. only discloses one air jet 13, the provision of a plurality of the same structure for providing the same function would have been obvious to one of ordinary skill in the art.

With respect to claim 25, the guide plates 146 form a chute.

9. Claims 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ono et al. in view of Schön et al. as applied to claims 15, 19 and 21-25 above, and further in view of Blake et al. (5,655,452).

With respect to claim 16, Ono et al. in view of Schön et al. discloses the claimed apparatus except for the two stacks of plates. However, Blake et al. teaches that it is known to use an apparatus for separating slip sheets from plates with two stacks 26 of slip sheets and plates as shown in Figure 1 of Blake et al. It would have been obvious to combine the teaching of Blake et al. with the apparatus disclosed by Ono et al. in view of Schön et al. for the flexibility of using different sized sheets with the apparatus.

With respect to claim 17, the cassette 24 disclosed by Blake et al. has squared corners as shown in Figure 5 of Blake et al.

10. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ono et al. in view of Schön et al. and Blake et al. as applied to claims 16-17 above, and further in view of Walter et al.

Ono et al. in view of Schön et al. and Blake et al. discloses the claimed apparatus except for the tapered edges. However, Walter et al. discloses a sheet feeding apparatus with a tapering of guide edges for feeding the side of sheets as shown in Figure 4 of Walter et al. This is well-known sheet feeding structure. It would have been obvious to combine this teaching with the apparatus disclosed by Ono et al. in view of Schön et al. and Blake et al. for the advantage for aligning the side edges of a sheet while it is fed forward and preventing jamming from occurring due to a misaligned sheet.

11. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ono et al. in view of Schön et al. as applied to claims 15, 19 and 21-25 above, and further in view of Hillhouse.

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Ono et al. in view of Schön et al. discloses the claimed apparatus except for the angled bottom. However, Hillhouse teaches a sheet collection area 54 that has a bottom curving to one side. It would have been obvious to combine the teaching of Hillhouse with the apparatus disclosed by Ono et al. in view of Schön et al. for the advantage of preventing the discarded slip sheets from piling up and jamming the plate handling area.

Allowable Subject Matter

12. Claims 26-27 are allowed.

13. Applicant's arguments filed 6/15/01 have been fully considered but they are not persuasive of any error in the above rejection.

Applicant argues that the method disclosed Hillhouse cannot be used to direct pulses of gas for removing the slip sheet. The examiner disagrees with this assertion. It does not appear to be necessarily true that the baffle 57 will open and close if the nozzles 62 are pulsed. Many factors would appear to be involved in the matter including the length and frequency of the pulses and the size and weight of the baffle 57. Furthermore, if the pulses do result in movement of the baffle 57, the method of removing the slip sheet is not necessarily hindered. As mentioned above in the prior art rejection, if a first use of pulse of the jets 62 to remove the slip sheet are unsuccessful, it would appear to be a very obvious step to repeat the use or pulse of the nozzle 62 in order to attempt the removal of the slip sheet a second time. Closure of the baffle 57 between attempts would not appear to hinder the removal process since the baffle 57 would open again upon each use or pulse of the nozzle 62.


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14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Colilla whose telephone number is (703) 308-2259. The examiner can normally be reached M-F, 8:30-5:30. Faxes regarding this application can be sent to (703) 746-4405.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached at (703)305-6619. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.


Dan Colilla
Primary Examiner
Art Unit 2854

September 9, 2003